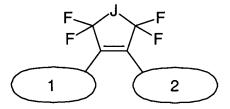
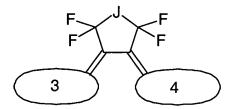
### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-9. canceled
- 10. (new) A material given by Formula I and Ib:

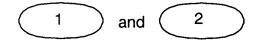


Formula I



Formula Ib

Wherein the



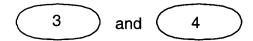
groups are chosen respectively from the following:

$$e \xrightarrow{f} x d$$
 and  $e \xrightarrow{x} c$ 

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wherein



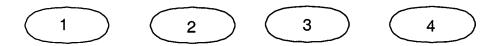
are together chosen from:

$$e$$
 $x$ 
 $a$ 
 $x$ 
 $c$ 

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\* indicates the point of attachment to Formula I or Formula Ib; the phenyl groups in



may independently of each other be replaced by pyridine and pyrimidine groups;

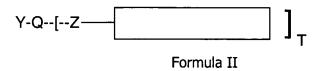
wherein X is selected from S, O, NH, Se, CH<sub>2</sub>, P;

wherein J is selected from CF<sub>2</sub>, CH<sub>2</sub>, CFH, NR<sup>9</sup> wherein R9 is selected from H, C1-40 branched or straight chain alkyl wherein one or more of the CH<sub>2</sub> groups may be replaced by O, CH and the terminal CH<sub>3</sub> group may be replaced by a CH<sub>2</sub> group or an SH, OH, COOH, CHO, O<sub>2</sub>CCHCH<sub>2</sub> or O<sub>2</sub>CC(CH<sub>3</sub>) CH<sub>2</sub> group;

wherein a and d are independently selected from CH<sub>3</sub>, CF<sub>3</sub>, CH<sub>2</sub>CH<sub>3</sub>, OCH<sub>2</sub>CH<sub>3</sub> or Formula II;

b,c,e and f are independently selected from H, Formula II or C1-40 branched or straight chain alkyl wherein one or more of the CH<sub>2</sub> groups may be replaced by O, CFH, CF<sub>2</sub>, CH and the terminal CH<sub>3</sub> group may be replaced by a CH<sub>2</sub> group or an SH, OH, CF<sub>3</sub>, COOH, CHO, O<sub>2</sub>CCHCH<sub>2</sub> or O<sub>2</sub>CC(CH<sub>3</sub>) CH<sub>2</sub> group

wherein Formula II is given by:



wherein Y is selected from O, -CO<sub>2</sub>-, O<sub>2</sub>C, S, CH<sub>2</sub>, or a single bond;

Q is selected from $(CH_2)n$ , n is 1-20 or $(CH_2)m$ - $[Si(L2)-O]q$ - $Si(L2)-(CH_2)p$ - where m is 2-20, p is 2-20, q is 1-12 and the L groups are independently of each other selected
from CH <sub>3</sub> , CF <sub>3</sub> , H;
Z is O or CO <sub>2</sub> or O <sub>2</sub> C or CH <sub>2</sub> or a single bond;
is a mesogenic group;
T is 1 or 2 or 3;
when T is 2 then Q may also be selected from $(CH_2)gN((CH_2)r)_2$ , $(CH_2)gSi(CH_3)((CH_2)r)_2$ ,
$(CH_2)gP((CH_2)r)_2$ , $(CH_2)gGe(CH_3)((CH_2)r)_2$ , wherein the values of g and r are independently selected from 1-20;
when T is 3 then Q may also be selected from $(CH_2)g'Si((CH_2)r')_3$ , and $(CH_2)g'Ge((CH_2)r')_3$ ;
wherein the values of g' and r' are independently selected from 1-20;
provided that at least one of a.b.c.d.e.f are selected from Formula II.

11. (new) A material according to claim 10 wherein the mesogenic group is given by Formula III:

Formula III

A, B, B' D are selected from the following rings:

1			
1			
1			
1			
1			
1			
1			
1			
1			
1			
1			

the above rings may be substituted with one or more of the following substituents in at least one of the available substitution positions: F, Cl, Br, CH<sub>3</sub>, CN, OR, R and NCS where R is given by  $C_{1-16}$  branched or straight chain alkyl; B' may also be selected from single bond;

 $Z^5$  is selected from CN, F, Cl, NO<sub>2</sub>, R, OR, CO<sub>2</sub>R, CF<sub>3</sub>, OOCR, NCS, SCN, where R = straight chain or branched chain alkyl and may include from 1-16 carbon atoms and including where one or more non-adjacent CH<sub>2</sub> groups may be substituted by CH(CN), CH(CF<sub>3</sub>), CH(Cl), CH(CH<sub>3</sub>) in chiral or non-chiral form and one or more non-adjacent CH<sub>2</sub> groups may be substituted by CH such that there is a double bond present and the terminal CH<sub>3</sub> group may be replaced by a CH<sub>2</sub> group;

provided that the total number of rings present is not greater than 4;

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 $W_1$  and  $W_2$  and  $W_3$  are independently selected from COO, OCO, single bond,  $CH_2CH_2$ ,  $CH_2O$ ,  $OCH_2$ , O, S, CH=CH, C=C,  $OCO(CH_2)_X$ ,  $COO(CH_2)_X$  wherein  $_X$  is 1-4.

- 12. (new) A material according to claim 10 wherein the mesogenic group or at least a part of the mesogenic group is given by the cholesteryl group or a derivative of the cholesteryl group.
- 13. (new) A material according to claim 10 wherein the core of the mesogenic group is chosen from the following:

wherein in each of the mesogenic groups, one or two or three of the phenyl rings may be, independently of each other, replaced by cyclohexyl, pyrimidine or pyridine and the cyclohexyl groups and phenyl groups may independently of each other be substituted in

one or two or three positions with F, the  $CO_2$  group may also be replaced with  $O_2C$  or C=C.

- 14. (new) A liquid crystal mixture comprising at least one compound of claim 10.
- 15. (new) An electro-optic device comprising at least one compound of claim10.
  - 16. (new) An electro-optic device comprising a mixture as defined in claim 14.
- 17. (new) A device according to claim 15 wherein the electro-optic device is a liquid crystal device.
- 18. (new) A device according to claim 16 wherein the electro-optic device is a liquid crystal device.
- 19. (new) A device according to claim 15 which is multiplex addressed or is addressed by light.
- 20. (new) A device according to claim 16 which is multiplex addressed or is addressed by light.